ALEX:
MUCH MORE THAN A
CHARACTER GENERATOR.

AMPEX

ALEX.
WHEN YOU WANT TO CREATE EXCITEMENT
WITH CHARACTERS AND SYMBOLS!

...characters flying out of nowhere, tumbling into formation as they change colors and overlap; titles changing perspective; credits following the outline of an image on the screen...

BEFORE the introduction of the ALEX™ character generator, you'd expect to use an ADO® system to accomplish these exciting effects, but now they're just a few of the unique capabilities of this

The ALEX system saves you time and money, and gives you exciting effects with true perspective of symbol, word, line or page, *automatically*.

new antialiasing character generation and animation system. You see, the ALEX system is a completely new design from the architecture out, so it gives you all the high-end capabilities you need, including real-time animation, and still fits your budget. And because this new character generator design reduces the need to use other, expensive pieces of equipment, you'll realize even more cost savings as you put it to work.

RGB LINES
(3 CABLES)

SIGNAL
SYSTEM

OPTIONAL
SECOND
CHANNEL

RGB LINES
(3 CABLES)

CHEAPERNET/
ETHERNET

50 Ohm
Terminator

RGB MENU
MONITOR

CONSOLE

KEYBOARD

MOUSE

The architecture is the key.

We knew that the ALEX system had to deliver speed for on-air and remote applications, *and* superior graphic composition capabilities for post production. It was readily apparent that the usual frame buffer approach wouldn't deliver both.

We also knew that hardware and software costs had to be lower than with other approaches so that we could offer you a high-end character generation and manipulation system at an affordable price.

So we developed a revolutionary new "pipeline" 4:4:4:4 architecture that allows the ALEX system to move more symbols or characters, *in real-time, individually on the screen, in any direction, in every field,* than any other character generator! And for the ultimate in video quality, ALEX provides an effective character resolution of 4.6 nanoseconds, and 256 levels of anti-aliasing with 256 levels of transparency.
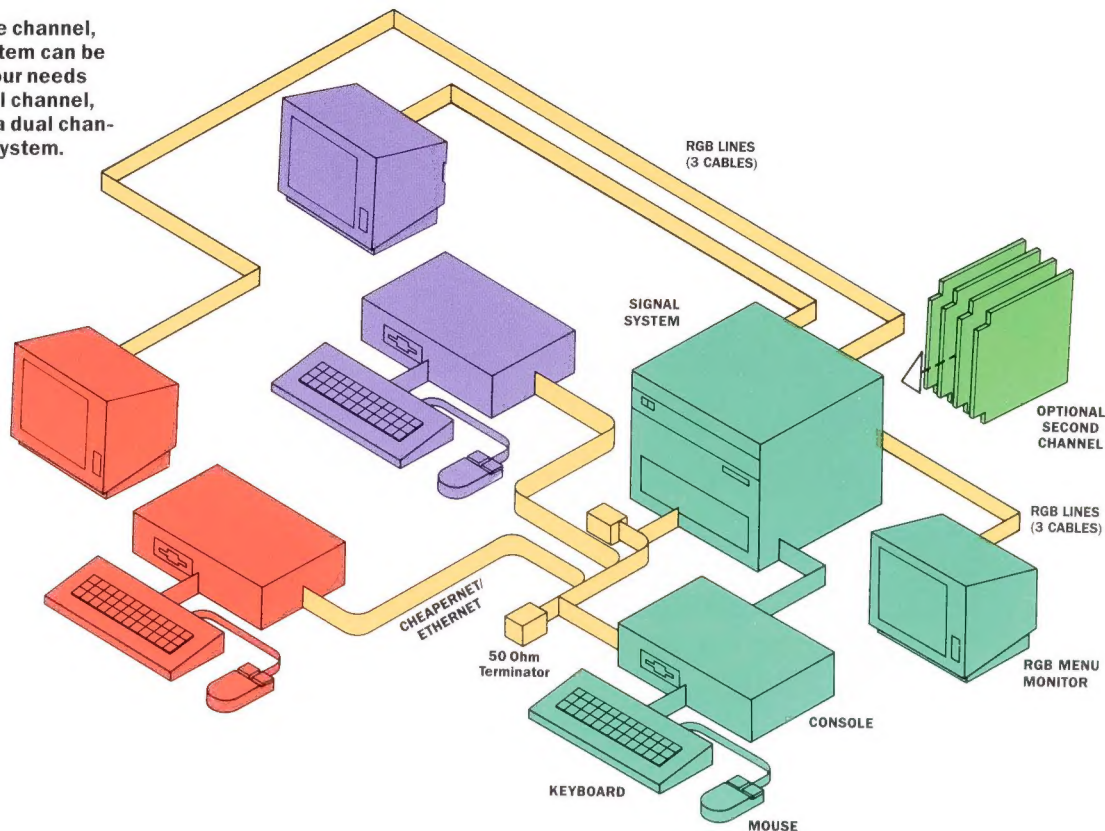
Now you can have the flexibility to do real-time animation without the use of external equipment, and still produce high quality graphics. For example, during all operations, even those in which complicated motion is used, your characters will remain fully anti-aliased, giving you sharp, clear characters.

The basic ALEX system consists of a keyboard with a mouse, a local 3½" floppy disk drive, and a rack-mountable signal system with an internal 40 Mbyte hard drive. An optional monitor data tablet with a stylus is also available. ALEX can be a single-user system, a dual channel preview/program system, or a dual channel/dual user system. Each less complex system can be upgraded as your needs change.

You can also choose among composite, component analog, and component digital outputs, so you're not locked in to any one format. And for complete flexibility, you can place keyboards throughout your facility which can access unused operational channels as needed.

Architecture developed especially for ALEX provides the flexibility to do real-time animation without use of external equipment.

A SUPERIOR HUMAN INTERFACE AND THE FLEXIBILITY TO FIT YOUR FACILITY EXACTLY.

A combination of dedicated keys and on-screen dialog windows gives you simple operation and full control, plus the speed to handle those rush jobs.

You also have the ability to create and save custom user environments for specific situations, whether it be a show, a client, or for any one of several operators. These set-ups can include fonts, color palettes, color schemes, timing parameters, and more.

Dynamic Attribute Manipulation (DAM!)

The true performance of any system depends on two factors—raw speed and the amount of interaction possible between the user and the system. In the past, users have had very little control over font characteristics. Generally, control has been limited to size and italics, and even here the user's control was severely limited.

With the new DAM module, a standard ALEX system feature, you have a level of control never before

available to you in a character generator. DAM gives you several ways to resize or apply italics to fonts, as well as the ability to display aspect characteristics in the X, Y, and Z axes. The display characteristics of shadows and borders are also controllable using DAM.

The ALEX system's Integrated Drawing Package lets you add exciting graphic design elements, and you don't need external equipment to do it!

The ability to add graphic design elements is a tedious task with today's character generators, often requiring the use of external paint systems, still stores, or camera stands. This process normally requires several people and considerable time in an environment where both are at a premium.

The ALEX system's Integrated Drawing Package solves this problem by providing you with a set of drawing tools that lets you incorporate geometric shapes, polygons, bezier curves and a host of other capabilities into any scene or graphic quickly and easily, and without the need for

With the new DAM package, many different characters and font attributes, such as shadows, can be displayed independently of images. In addition, full control over X, Y, and Z axes, along with X and Y axis aspect manipulation, means that ALEX can fully control the way characters look on-screen.
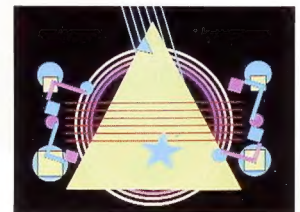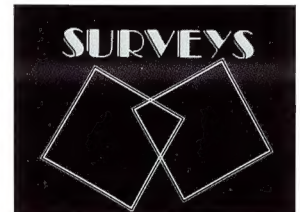
With the new Integrated Drawing Package, graphic design elements such as lines, circles, squares, rectangles, polygons and bezier curves can be added to any scene, for dynamic, exciting effects.

external equipment. You can combine these to make logos and other artistic elements that add pizzazz to any scene. Or you can fill the shapes with color and animate as you would any other symbol to create unique and dramatic visual effects.

ALEX

A NEW CONCEPT IN CHARACTER GENERATORS

ALEX® is a totally new character generator based on the idea that a character generation system can have high-end capabilities, including real-time animation, and at the same time be priced as a mid-range system.

Featuring all standard character generator functions, the ALEX system is unique in its ability to perform virtually unlimited manipulation and animation of characters and symbols far beyond standard "rolls" and "crawls." Control of *individual* characters and symbols in every field is possible because the ALEX system is based on a proprietary Ampex architecture.

The ALEX character generator is an anti-aliased system with 1,024 colors and 256 levels of transparency and anti-aliasing for all characters and symbols (4.6 nanosecond effective character resolution), providing unsurpassed video quality.

In addition to the 20 standard typefaces resident on the system, users can also purchase additional typefaces from a library of over 1,500. Typefaces are digitized as Bezier curves, ensuring the highest resolution. An internal color palette can generate more than 16 million colors.

Available in one or two channel configuration (single or dual user) the system consists of a keyboard with mouse, a local 3½" floppy disk drive, and a rack-mountable signal system with an internal 80 megabyte hard drive.

Each system supports the attachment of additional keyboard/console combinations as remote access stations (only one per channel active at a time), and multiple systems can be networked. Input/output options include composite analog, component analog (RGB or R-Y, B-Y, Y), and CCIR-601 component digital.

A state-of-the-art human interface is provided which consists of a single screen, window-based system with a keyboard and mouse controller. The system may be operated exclusively by the keyboard, or in combination with the mouse.

Unique Features

☐ Characters and symbols, individually or as groups, can be animated in real-time along any arbitrarily defined motion path. While moving along a defined path, characters/symbols can be tumbled, flipped, squashed, etc.

☐ Motion speed is variable, allowing smooth rolls and crawls to be fit/filled to meet specific time requirements.

☐ Text can be displayed through perspective.

☐ Character/symbol colors can change over time or as a function of overlapping other characters. Background, foreground and overlap colors can be selected from an internal palette of over 16 million colors. Top to bottom and bottom to top blends are treated as single colors.

☐ Characters can be mapped to follow the curve of a line or graphic. Each character can be tilted at the proper angle to maintain its position relative to the curve, or can remain upright, regardless of its position on the curve.

☐ In addition to standard drop shadows, the ALEX system can create variably-transparent drop shadows and plane shadows.

Options and Configurations

The ALEX character generator may be configured as a single user system, a dual channel preview/program system, or a dual channel, dual user system. Important hardware options will include the capture board, additional keyboards, additional disk drives, optical disk drives, and RGB color monitor. Logo Compose will be a future software option. The system is software switchable between NTSC and PAL.

Specifications

Video Inputs

Reference video	Composite Video or Black
Background video	Proposed SMPTE Analog Component standard, 525 lines; EBU Standard N10, 625 lines; Type L (Betacam) standard, 525/625; M-II standard, 525/625; or CCIR Recommendation 601
Background key	Analog or CCIR Recommendation 601
Keyer video	525/60 NTSC, 625/50 PAL, 625/60 PAL-M or Proposed SMPTE Analog Component standard, 525 lines; EBU Standard N10, 625 lines; Type L (Betacam) standard; 525/625; M-II standard, 525/625; or CCIR Recommendation 601

Video Outputs

|	
Monitor video	RGB video, 525/625
Program video	525/60 NTSC, 625/50 PAL, 525/60 PAL-M or Proposed SMPTE Analog Component standard, 525 lines; EBU Standard N10, 625 lines; Type L (Betacam) standard, 525/625; M-II standard, 525/625; RGB video, 525/625; or CCIR Recommendation 601
Program key	Analog or CCIR Recommendation 601
Keyer video	525/60 NTSC, 625/50 PAL, 525/60 PAL-M or Proposed SMPTE Analog Component standard, 525 lines; EBU Standard N10, 625 lines; Type L (Betacam) standard, 525/625; M-II standard, 525/625; or CCIR Recommendation 601

Control I/O

Symbol Generator	Ethernet, Cheapernet, SCSI, 2 Aux RS-232/RS-422 per channel 9-input GPI port per channel
Console	Ethernet, Cheapernet RS-232 to Keyboard RS-232 to PC
Keyboard	RS-232 to Console RS-232 to Pointing Device

Physical and Electrical

|	Symbol Generator	Console	Keyboard
Power	Less than 1500 W	Less than 50 W	Less than 5 W
Size (in.) (cm)	22.75H × 19W × 22.5D 57.8H × 48.3W × 57.1D	3.5H × 19W × 10D 8.9H × 48.3W × 25.4D	1.5H × 20.4W × 8.7D 3.8H × 51.8W × 22.1D
Weight	140 lb.	11 lb.	5.5 lb.

Specifications subject to change without notice or obligation.
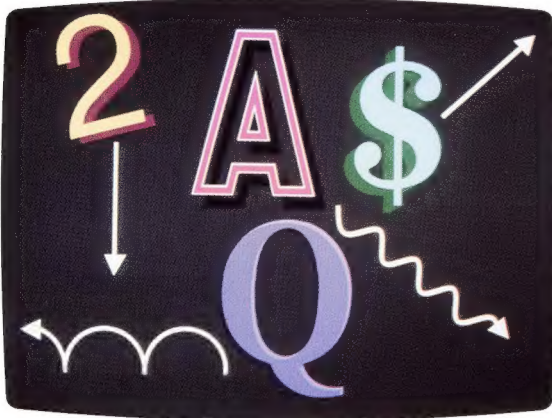
You have control over the motion of *every* character and symbol on the screen, individually or in groups, for every field.

Unique looks are what makes ALEX special. Overlaps are completely under your control. For example, you can specify any color in an overlap area, including live video. Anti-aliasing is maintained in all cases.
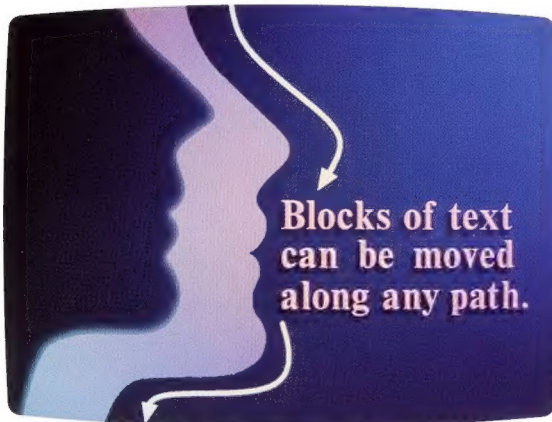
The ability to move blocks of text along arbitrary paths means you can do a credit roll, in this case, without cutting off her nose. While blocks of text may be animated along any arbitrary curve, providing tremendous flexibility, well beyond rolls and crawls.

You can automatically map characters to a curve, and no manual adjustments are required.

Add true perspective to your messages with symbol, word, line or page, *automatically*.

FOR INFORMATION ON AMPEX BROADCAST VIDEO PRODUCTS CONTACT THE VIDEO SALES MANAGER NEAREST YOU.

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